

## INDIAN MEDICINE IN BRITISH COLUMBIA\*

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I would like to give you briefly an idea as to how the Indians of the coast used to live. They were quite different from the usual Indian that we read about, who lived in wigwams. With our big trees, logs have always been plentiful and as the cedars split easily, they were able to make wide boards, or "shakes" as they are called, with which they built their houses. Beside the home in the village, each family had his camp on his own particular hereditary salmon river and trapping ground. These camp houses were built of the split shakes tied together with cedar bark rope, and if the Indian wanted to move for any reason, the house was taken apart, the boards piled across two or more canoes, and slowly propelled by paddle, wind and tide to its new destination. The only means of travel from place to place up the coast is by water, for there are numerous islands, and, also, the shores of the mainland are so mountainous and winding that roads are out of the question. The village consisted of a number of large houses built with huge logs for beams and walled in and roofed over with these shakes. Each house might be anywhere from thirty to fifty feet in

width and perhaps twice as long. A big fire in the centre of the earthen floor served for heating, cooking and ventilation, plenty of cold fresh air coming in through the cracks between the shakes. As a number of families lived in each of these houses, they were the original apartment houses, but did not have the same unhealthy features (of steam heat, etc.) that the modern ones have. In the Christianized villages these houses have been replaced with our style of house, and I think the change was not good until they learned to ventilate them properly.

These Indians have always had an abundance of food with a considerable variety. It was impossible to do much gardening, but there were berries of several kinds, wild rice, wild crab-apples and plums. Deer, mountain goat and bear were plentiful, while the sea abounded in salmon, halibut and codfish. Clams, crabs and other shell fish were also plentiful. Halibut is such a common word amongst the Indians that one of our teachers who was teaching the children to say the Lord's prayer, found that one little chap was saying, "Our Father who art in Heaven, 'halibut' be Thy Name." Large quantities of these foods were dried in the sun, and, while harder to masticate, they had two advantages—their vitamin content was increased rather than lost, and the teeth were given so much work to do that they had not time to decay. Many of our old Indians die with every tooth in place, although some are worn almost down to the gums.

An edible form of seaweed, gathered each spring and dried, provided iodine, iron, and acted as a laxative. Herring-spawn, gathered

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by suspending hemlock boughs in the water where the herring were gathered in large numbers, and then dried in the sun and wind, would keep indefinitely. The food which they would miss more than any other is an oil made from the oolachan or "candle-fish." This fish, so-called because when dried it will burn like a candle, is about as long as a herring, but more slender. They run in countless numbers up certain rivers each spring and are then caught by the ton. Many of them are salted, some are smoked, but the most of them are placed in large vats hollowed in logs, or more latterly made of lumber. If it is sunny weather, they are left to render themselves, but if necessary stones are heated and put in with the fish to hurry the process. The oil is skimmed off and stored in anything available. Since the advent of the white man's coal oil and gasoline tins, they have an abundance of receptacles. The way the Indians repair to the oolachan fishing and oil-rendering reminds an easterner very much of the busy times in the maple woods at syrup-making time. Personally, I would prefer the syrup, but a native's meal is incomplete without a little of this oil or grease. The Indians consider it a medicine as well as a food. It is used for gastritis or excessive vomiting due to any cause. So far as I know, it has not been assayed, but, especially when prepared in the sun, the vitamin D content should be high.

Obstetrical practice amongst the natives is not very thrilling, many of the babies being two or three days old before the doctor knows anything about them. The only two maternal deaths I have heard of were due to infection from retained placentas. The younger women are becoming so civilized that they must have a doctor. In the good old days, and even yet, many of the women work up till the day of delivery and are at it again in a day or two. It was not unusual for a baby to be born in the canoe in which the family were travelling. Every year or two, even now, a baby is born in the gasoline launch in which the parents are travelling from their homes to the canneries.

While some of the native midwives attempt to extract the baby in delayed cases, they have no instruments except their fingers, and I do not think they accomplish very much. As a rule, there is no interference, and though the bedding and bed may be very dirty, there is rarely any infection. Usually the room is darkened, if the woman is sick in the day time, and a dimly lighted lamp is placed in a far corner. Three or four old women sit on either side of the patient who is usually on a mattress on the floor. They support the patient, help her to change her position, and utter occasional words of encouragement. On the whole, there is very little said and the silence and darkness make it a very solemn occasion. When I am

called and find on external examination that the case is proceeding normally, I leave it to the women, though sometimes I wait to see what happens. One day, as soon as the baby was born, one of the attending women picked up a pair of scissors from the floor, walked to the window, tore a strip from the cotton rag that was serving as a sash curtain, tied the cord with it and cut it with the dirty scissors. I was so amazed that I couldn't interfere. However, both the mother and the baby got along well.

About 50 per cent of our native babies are born with a bluish discoloration of the skin in the sacral region. It is called the "Mongolian" spot, because Japanese and Chinese babies have the same characteristic. This opens a very interesting subject and while I have made some investigations in regard to it I only mention it here.

Some of the tribes are very superstitious about the birth of an infant. One cold rainy night, when I returned quite late from a trip, I found that an old Indian patient had been trying to get away from the hospital all day. The nurses would not let him go without my consent. Upon questioning him, I found that he had learned that a baby had been born in the hospital that morning, and he believed that some other occupant of the building would have to die to even things up. So far as he could see, he was the most likely candidate, and though he was barely over a severe pneumonia and had no friends at the only accessible cannery, he insisted upon leaving, and out he went into the rainy night. That is the last I have seen or heard of him.

There are very few cows up the coast and it is very rarely that an Indian child gets fresh milk. Most of the women nurse their babies until they are fifteen months old. There are a surprising number that cannot nurse them at all. Condensed milk is used for infant feeding to a very large extent, though as soon as a baby is able to cry for it, he gets anything he wants, even to soda water, which the Indians drink by the case. Naturally there is a high infant mortality, though in the village where there is some supervision, they are doing better. On the whole the population is increasing.

While the incidence of tuberculosis is several times that found with whites, there is not so much of it as one is led to believe. Some fail very rapidly when the disease starts but others show a very surprising amount of resistance. While the pulmonary form of tuberculosis is most common, as one would expect where no raw milk was being used, there is quite a lot of the glandular type, though less than there was fifteen years ago. I would say that the spine is most frequently affected, after the glands, probably about as often as the other

bones or joints combined. Tuberculous meningitis is a very frequent cause of death in children. Hospital treatment is well worthwhile for the ordinary tuberculous Indian, as the response is usually very satisfactory.

Syphilis is seen fairly often. Many in whom we suspect it give negative Wassermann tests. Gonorrhoea is common, and while the men apply for treatment the women do not, unless there are acute symptoms, which rarely occur.

I shall refer to the medicine-men, but as they confined themselves to magical or spiritual practices, I would like to mention first the various other methods of treatment, such as by herbs, scarification, etc. Mr. Harlan I. Smith, of the Department of Anthropology, Ottawa, has compiled a *Materia Medica* based on information received from the Bella Coola Indians, and the Indians on the upper Skeena River, which is very complete. I will only mention a few of the common things in use.

One of the commonest of their own remedies, of which they have an inexhaustible supply, is sea water. When I went into a house one day I found the owner, an elderly chief, sitting on a chair, with his head in his hands, his elbows resting on his knees and a big basin between his feet. At his side was a tea-kettle and on a chair beside him a cup. As he looked most dejected, I asked him what he was doing. He replied, "Oh I am just taking some salt water. I didn't feel well this morning." He had gone to the beach, filled the tea-kettle with salt water, heated it, and was now drinking it. There is no doubt about its action as an emetic when taken freely as this man was doing; in fact, it cleanses the whole alimentary tract. If a person isn't well, the Indian's first thought is of his intestinal tract, but instead of calling the trouble by some big name, such as intestinal toxæmia, auto-intoxication, etc., he simply says, "There is too much green inside," and asks for a cathartic of some sort. While some still use salt water, it is too strenuous for the modern native, who prefers the white man's salts or castor oil. And they get away with a lot of that. The bark of the "devil's club" is steeped and the infusion used as a cathartic. This is used by the hunter before starting on a trip, as he believes a course of treatment with it will not only make his physical strength greater, but will give him greater courage and he is sure to be successful.

The bark of the white fir was boiled and the decoction used in tuberculous cases. Many other things were used, among them an infusion of the needles and small branches of the jack-pine or spruce, for the same purpose. Extracts from fern roots were taken internally for worms, which is not so far from our use of the male fern in cases of tapeworm. Juniper was used as a diuretic, mint for pain in the stomach,

and the leaves of Labrador tea as a simple beverage. The skin of the common nettle was and still is used in eruptive conditions. One of the most universally used herbs is the false hellebore or *veratrum viride*. As I have seen it being used in all the villages I visit, I asked if it was being used in other places, and the Indians said "yes." Eaten raw the roots are considered very poisonous, and I do not doubt it. As an infusion of the roots, it is employed very freely as an emetic and purgative. After steeping several of the smaller roots in two quarts of cold water for six days, it is used for common colds and influenza. As the action is somewhat similar to aconite, according to our *materia medica*, this would probably be good practice. An extract made by boiling the roots for half an hour is rubbed into the scalp for headaches and neuralgia, and also is used as an embrocation in case of sprained joints. The juice from the ground roots was used locally to remove rheumatic pains. For very resistant cases, the skin over the affected part was whipped with spruce boughs, and if any of you have rubbed against a spruce you know how sharp the needles are. After the skin had been well punctured and was bleeding freely, the juice was rubbed in. One treatment is said to have brought about a cure. I think one would be all a person would care to have. The dried root, ground to a powder and encased in tallow, was taken, and followed by salt water, to remove hair balls or other foreign bodies from the stomach. Burnt to charcoal and pulverized, it was given to new-born babies to remove meconium. Whenever there is "flu" around, or any epidemic condition, one sees the roots on the top of the stove in most of the houses. As it slowly burns or scorches it gives off fumes, which the natives think have a disinfectant value.

Another favourite remedy was counter-irritation. We see many with scars of burns about joints or with linear scars caused by sharp instruments. Powdered *veratrum* leaves were placed in a little periwinkle shell and bound against the skin till a blister formed. The powdered root was sometimes used. After setting fire to it, it was placed on the skin at the desired sites. Cast off snake skins, which are rare up our way, were rolled into tight rods, ignited and used for blistering. For chest colds, a shirt would be soaked in *veratrum* extract, dried, and then worn next the skin. Sharp stones and, later, knives, were used to make multiple shallow incisions and I have often been told how much better they felt after "the bad blood" was let out. The Indians on the west coast of Vancouver Island are especially fond of this, and their bodies are literally covered with such scars. We had a patient recently who had been quite a sprinter. His

legs and thighs were covered with vertical scars. He told me that a couple of weeks before each race he had his legs scarified this way to let the old blood out as he believed he could run faster with all fresh blood in them. Wet cupping was sometimes done, the native who performed the operation using his mouth as the cup. In spite of lack of antiseptic precaution, there is little evidence of these incisions having suppurred, though the burns were very slow in healing.

Spruce gum or pitch was used a great deal for dressing wounds and for poulticing boils. Fractures were immobilized crudely with splints and this gum, and they tell of remarkable recoveries due to such treatment. I had a boy from the west coast where the Indians rarely have access to a doctor, who had several nasty sinuses secondary to Pott's disease and cervical adenitis. We treated him during the summer in our hospital and when they left after the fishing season I thought I was saying a final goodbye to the lad. To my surprise he was brought back the following season, and though his spine was much more deformed the sinuses were in far better condition than when he left. Imagine my surprise and disgust when they told me that they had been using cow manure. Outside of the old fashioned community houses in which the Indians used to live was a receptacle in which urine was stored. The sediment from this was used for cleansing purposes, and it was also used for running ears, and was snuffed up noses for colds in the head.

Steam baths were employed, the patient sitting over a tank of water, and, after being draped with blankets, hot stones were thrown into the water till he perspired freely. Sometimes, the leaves of the western dock or of a small form of kelp were placed over hot stones and he lay on them till he was perspiring. This was followed by a plunge into the salt water and sometimes by a hot wild cherry drink.

Abscesses were incised, though not until the skin was very thin over the pus, so far as I can find out. A sea lion whisker was used as a filiform bougie in case of stricture with urinary retention.

The so-called "Flat-head" tribes of Vancouver Island deformed the heads of their infants by strapping them between two boards which met at the top, causing the forehead to slope sharply back from the eyebrows. According to Garrison, ovariectomy and trephining were practised by the North American Indians, and Mr. Smith, of Ottawa, found two skulls at Boundary Bay, a few miles from here, that had been trephined. I have here to-day one which was found in the midden at Eburne. Dr. G. E. Kidd, of Vancouver, a former pro-

fessor of anatomy at Queen's University, states that it shows unmistakable evidence of trephining. It is of such interest that I would like to quote from his description, which I will condense as much as possible.

Taking the depth of the midden, and by counting the rings of stumps of trees growing over it, we may assume that its age (the skull) might be as much as one thousand years or more. The skull is one of a young adult male—dentition is perfect. The left parietal bone is forced outward, opening the sagittal and left parieto-occipital sutures throughout their entire extent. In the occipital region of the skull there are two openings—a larger one situated just above the external protuberance, and a smaller one lying two inches lateral to this. The larger one is circular, being saucer-shaped, with a surface diameter of forty mm. The surrounding bone shows evidence of healing for a period of time extending over some weeks at least. The smaller opening shows no signs of healing. The diploe are open, the edges are sharply marked, and scratches made by a cutting instrument are to be seen on its walls. It barely pierces the inner table at two points. The remainder of the floor is exceedingly thin. This suggests that the operator approached the interior of the skull with great caution, that he had a steady hand and a sharp instrument. This was probably a small spoon-shaped scraping tool, the bone being removed in small shreds or chips. There are no marks on the skull surface about the opening such as might be made by the instrument slipping. It seems to be a clear case of ante-mortem trephining, the larger opening having been made some time prior to and the smaller one immediately before death. The fact that the last opening barely perforated the inner table would indicate that the operation was not completed, the probability being that the patient died while it was in progress.

Among the American aborigines, according to a Dr. Muniz, the operation was performed by the medicine-man. They believed that all headaches, dizziness, fits, etc., were caused by an evil spirit enclosed in the skull. An opening was made through which it might escape. Rev. Mr. Raley, of Sardis, who loaned me some of the exhibits here to-day, relates that he had been approached by an Indian who suffered from chronic headaches. He requested that Mr. Raley bore a hole in his head to allow the evil spirit causing them to get out.

Dr. Tunstall, in his presidential address when this Association met in Vancouver for the first time, seventeen years ago, said among other things, "Those who have made a special study of the practices and customs of savage races inform us that the primitive doctor or 'medicine-man' was not that self-conscious fraud and humbug he is commonly thought to have been, but a person with a real belief in his own powers and cures, and that those cures, when genuine, were generally, if not always attributable to hypnotism, especially that phase of it known as suggestion. A state of hypnosis was induced in his patient by the monotonous droning of the medicine song and the noise of the drum and rattle. When in this condition, his

attempt to extract the spirit of the disease from the patient's body, and his statement that he had presently done so, acted suggestively upon the imagination of the patient and effected his cure."

In common with other savages and unenlightened peoples, the Indian looked upon illness as the result of evil spirits or witchcraft. Accordingly, the way to cure the patient was either to drive out the spirits or find the person who had bewitched him. As this required supernatural powers, certain individuals trained themselves or were trained as Shamans or medicine-men. It was no easy thing to become a doctor even at that time, as it not only required skill in psychology and sleight of hand but the power of physical endurance. To acquire the supernatural power, the neophyte had to retire to the mountains, fast for days, and thus get into communion with the spirits of the natural elements. Rev. Mr. Crosby quotes as follows:

After such a fast, usually of ten days' duration, the young candidate, nearly overcome with exhaustion, started out as if he had come from another world. He believed that he had been taken possession of by a mighty spirit. After reaching the village, the lithe young body would be thrown about the great room, and by a power uncontrollable would be doubled and twisted and knotted into a hundred contortions like a fowl deprived of its head. Crowds would gather to see the manifestation of this mighty power, none doubting its genuineness. After this there would be more fasting, and cleansing of the inward man by drinking large quantities of salt water and vomiting it up again. He must again commune with the spirits and the wild beasts, and tear and eat their flesh while yet quivering with life and drink their warm blood to make his strength more fierce to do battle with the evil spirits.

Returning to the village, he had to commune again with the wise men, conjurors and older medicine-men. It was a strenuous time, but parents were quite willing to have their sons try for it, though they died in the attempt.

Dr. Geddes Large, of Port Simpson, gave me the following description of one session he viewed secretly. The "doctor" was decked out in war paint and ceremonial robes with feathers and ermine skins and brandished a rattle. Others seated about the room were beating on the floor with sticks to keep time to their chanting. The old fellow would dance around for awhile and then with a wild yell spring over to the cot and rattle vigorously over the patient. On March 25th of this year, at the same village up on the Skeena River, two Indians were convicted in police court of practising witchcraft. Sometimes the so-called doctor will suck the evil spirit from the person, or after sucking produce a stick, stone or other foreign body. These men had scooped a spirit from six different places of the patient's body with their cupped hands, and then raising their hands in the air, had blown the spirits away.

The old patient assured the judge that the doctors had blown away the spirit of a bear, and both he and the doctors assured the court of their sincerity.

If business was slack, the Indian doctor did not hesitate to resort to tricks. I have here to-day, through the kindness of Dr. Wrinch, of Hazelton, and Rev. G. H. Raley, of Sardis, some "soul-traps." One of them is a piece of netting about three feet square, with a quarter-inch mesh, made entirely of cedar bark. Another is made of bone and another of wood, each very nicely carved from a piece of the material about six inches long and a quarter of an inch thick. The carving represents the wide-open mouths of double-headed wolves, one head facing each way. The medicine-man would pick out a person whom he thought a likely subject, and tell him that in a dream he had seen his soul flitting through the forest. As this was a death sentence unless the victim could get his soul back a bargain would be made, and the doctor would agree to try and catch it. Equipped with one of these traps and his reputation for supernatural power, he disappeared into the forest for a variable length of time. Meanwhile the victim would take to his bed or if already there would rapidly grow weaker. In due course the medicine-man reappeared with the soul and replacing it in the body with appropriate incantations, all would be well again.

One of our old Indians informed me that they used to have a basin of water ready for the medicine-man when he came. To show that he was not fooling them, he would wash his mouth out with this, and then remove his upper clothing to show that he had nothing concealed. Then with just his head-dress and necklace of dance beads he would dance, while his assistants drummed vigorously to help him work up his strong spirit or "tamanawas". Then, with a howl, he would put his mouth against the patient's body and suck with all his strength, several times if necessary. Occasionally when the evil spirit did come out, it would come suddenly and go right down his throat, and he would have to choke and splutter and cough till he got it up again. Then carefully ejecting it from his mouth into his cupped hands, he would hold it under water for a few minutes to drown it, roll it about between his hands, then with a strong puff, blow it away. This man also told me that when he was about ten years old, some sixty years ago, he was breaking a stick with his teeth when he swallowed a sliver. They took him to an old lady doctor who felt the back of his neck, sucked and blew on it. As she blew, she started to rub the front of his neck and finally with a flourish, produced a real sliver, and he felt better immediately.

The chiefs had more or less power over the medicine-men, and if they were jealous of any one they would get the medicine man to put the victim out of the way. The usual way of doing this was to bewitch him with an evil or "mesatchie box". These are very rare, and the one I show you now belongs to Rev. Mr. Raley. Their faith in the power of a person who can use one of these boxes is still very strong, and nothing causes more excitement around an Indian village than for a report to get out that someone has a mesatchie box. The usual procedure is to gather some things that have been in intimate contact with the person of the victim, such as hair combings, a handkerchief, spittle, a neck band from a shirt, etc., and to place the things in the box which is then hidden out in the woods. Word is passed

around that a mesatchie box is out for a certain person. The report finally gets to the ears of the victim who is so frightened that he sickens, or, if ill, slips off very rapidly. Just this spring, a young man who has been in the hospital off and on with tuberculosis, for some years, contracted influenza and had a recrudescence of the tuberculous process, and failed rapidly. As I noticed that he was unusually despondent one day, I asked him the reason. He told me that his uncle had been in and advised him to sell his boat so that he could get the good of the money. There was no chance of his recovery for a mesatchie box had been put out for him. I investigated and could not get any corroboration, but, whether or no the chap soon slipped away.